Permit No. WA-002935-1
Issuance Date: April 7, 2006
Effective Date: April 7, 2006
Expiration Date: April 7, 2011

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT No. WA-002935-1

State of Washington
DEPARTMENT OF ECOLOGY
Northwest Regional Office
3190 – 160th Avenue SE
Bellevue, WA 98008-5452

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

CITY OF NORTH BEND

P.O. Box 896

North Bend, Washington 98045

Plant Location: 400 North Bend Way North Bend, Washington 98045	Receiving Water: South Fork of the Snoqualmie River
Waterbody I.D. No.: WA-07-1110	Discharge Location: Latitude: 47° 29' 52" N Longitude: 121° 47' 03" W
Plant Type: Oxidation Ditch	

is authorized to discharge in accordance with the Special and General Conditions that follow.

Kevin C. Fitzpatrick
Water Quality Section Manager
Northwest Regional Office
Washington State Department of Ecology

TABLE OF CONTENTS

SPECIAL CONDITIONS

GENERAL CONDITIONS

SUMMARY OF SCHEDULED PERMIT REPORT SUBMITTALS

Permit Section	Submittal	Frequency	First Submittal Date
S3.A.	Discharge Monitoring Report	Monthly	June 15, 2006
S3.E.	Noncompliance Notification	As necessary	
S4.B.	Plans for Maintaining Adequate Capacity	As necessary	
S4.D.	Notification of New or Altered Sources	As necessary	
S6.D.	Annual Submittal of List of Industrial Users	Yearly	July 1, Annually
S8.	Acute Toxicity Testing Data	2/year in 2009 July 2009 October 2009	October 31, 2009 January 31, 2010
S9.	Chronic Toxicity Testing Data	2/year in 2009 July 2009 October 2009	October 31, 2009 January 31, 2010
S11.	Pollutants listed in Part B.6 and Part D of the permit application form 3510-2A	3/permit term	October 7, 2010, with the permit renewal application, Form 3510-2A
G1.	Notice of Change in Authorization	As necessary	
G4.	Permit Application for Substantive Changes to the Discharge	As necessary	
G5.	Engineering Report for Construction or Modification Activities	As necessary	
G7.	Application for Permit Renewal	1/permit cycle	October 7, 2010
G21.	Notice of Planned Changes	As necessary	
G22.	Reporting Anticipated Noncompliance	As necessary	

SPECIAL CONDITIONS

S1. DISCHARGE LIMITATIONS

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a concentration in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

A. Interim Effluent Limitations Low River Flow Period

Effective during **August, September, and October** until the City of Carnation begins operation of its wastewater treatment plant (WWTP), the Permittee is authorized to discharge municipal wastewater at Outfall 001 subject to the following limitations:

EFFLUENT LIMITATIONS[a]: OUTFALL #001		
Parameter	**Average Monthly**	**Average Weekly**
Carbonaceous Biochemical Oxygen Demand, 5-day ($CBOD_5$)	25 mg/L 85% removal of influent CBOD	40 mg/L
Total Suspended Solids	30 mg/L (293 lb/day) 85% of influent TSS	45 mg/L (439 lb/day)
Fecal Coliform Bacteria	200 cfu/100 mL	400 cfu/100 mL
pH[b]	Daily minimum is equal to or greater than 6.0 and the daily maximum is less than or equal to 9.0 standard units	
Parameter	**Average Monthly**	**Maximum Daily[c]**
$CBOD_5$	179 lb/day TMDL-based Limit	307 lb/day TMDL-based Limit
Total Ammonia (as NH_3-N)	8.4 lb/day TMDL-based Limit	20.25 lb/day TMDL-based Limit
Mercury (total recoverable)	0.2 µg/L	0.4 µg/L

[a] The average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.

[b] Indicates the range of permitted values. The instantaneous maximum and minimum pH shall be reported monthly.

[c] The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.

B. Interim Effluent Limitations High River Flow Period

Effective during **November through July** until the City of Carnation begins operation of its WWTP, the Permittee is authorized to discharge municipal wastewater at Outfall 001 subject to the following limitations:

EFFLUENT LIMITATIONS[a]: OUTFALL # 001		
Parameter	**Average Monthly**	**Average Weekly**
Carbonaceous Biochemical Oxygen Demand (5-day)	25 mg/L (500 lb/day) 85% removal of influent CBOD	40 mg/L (801 lb/day)
Total Suspended Solids	30 mg/L (600 lb/day) 85% removal of influent TSS	45 mg/L (901 lb/day)
Fecal Coliform Bacteria	200 cfu/100 mL	400 cfu/100 mL
pH[b]	Daily minimum is equal to or greater than 6.0 and the daily maximum is less than or equal to 9.0 standard units.	
Parameter	**Average Monthly**	**Maximum Daily**
Mercury (total recoverable)	0.2 µg/L	0.4 µg/L

[a] The average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.

[b] Indicates the range of permitted values. The instantaneous maximum and minimum pH shall be reported monthly.

C. Final Effluent Limitations Low River Flow Period

Effective when the City of Carnation begins operation of its WWTP and lasting through the expiration date, the Permittee is authorized to discharge municipal wastewater at the permitted Outfall 001 during **August, September, and October** subject to the following limitations:

EFFLUENT LIMITATIONS[a]: OUTFALL # 001		
Parameter	**Average Monthly**	**Average Weekly**
Carbonaceous Biochemical Oxygen Demand (5-day)	25 mg/L 85% removal of influent CBOD	40 mg/L
Total Suspended Solids	30 mg/L (293 lb/day) 85% removal of influent TSS	45 mg/L (439 lb/day)
Fecal Coliform Bacteria	200 cfu/100 mL	400 cfu/100 mL
pH[b]	Daily minimum is equal to or greater than 6.0 and the daily maximum is less than or equal to 9.0 standard units.	
Parameter	**Average Monthly**	**Maximum Daily[c]**
$CBOD_5$	150 lb/day TMDL-based Limit	257 lb/day TMDL-based Limit
Total Ammonia (as NH_3-N)	8.4 lb/day TMDL-based Limit	20.25 lb/day TMDL-based Limit
Mercury (total recoverable)	0.2 µg/L	0.4 µg/L

[a] The average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.
[b] Indicates the range of permitted values. The instantaneous maximum and minimum pH shall be reported monthly.
[c] The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.

D. Final Effluent Limitations High River Flow Period

Effective when the City of Carnation begins operation of its WWTP and lasting through the expiration date, the Permittee is authorized to discharge municipal wastewater at the permitted Outfall 001 during **November through July** subject to the following limitations:

EFFLUENT LIMITATIONS[a]: OUTFALL # 001		
Parameter	**Average Monthly**	**Average Weekly**
Carbonaceous Biochemical Oxygen Demand (5-day)	25 mg/L (500 lb/day) 85% removal of influent CBOD	40 mg/L (801 lb/day)
Total Suspended Solids	30 mg/L (600 lb/day) 85% removal of influent TSS	45 mg/L (901 lb/day)
Fecal Coliform Bacteria	200 cfu/100 mL	400 cfu/100 mL
pH[b]	Daily minimum is equal to or greater than 6.0 and the daily maximum is less than or equal to 9.0 standard units.	
Parameter	**Average Monthly**	**Maximum Daily**
Mercury (total recoverable)	0.2 µg/L	0.4 µg/L
[a] The average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.		
[b] Indicates the range of permitted values. The instantaneous maximum and minimum pH shall be reported monthly.		

E. Mixing Zone Descriptions

The maximum boundaries of the mixing zones are defined as follows:

Outfall 001:

1. The length of the chronic mixing zone is limited to 175 feet total length. The mixing zone extends 100 feet upstream and 175 feet downstream of the diffusion structure. The flow of the river available for chronic dilution in the mixing zone is limited to 25% of the 7Q10 flow of 285 cfs; therefore, the flow available for chronic dilution is limited to a maximum of 21.25 cfs. The chronic dilution factor DF_c = **18.7.**

2. The lengths of the acute mixing zone are 10% of the lengths of the chronic zone, which is 10 feet upstream and 17.5 feet downstream of the diffusion structure. The acute dilution factor DF_a = **3.3.**

The chronic and acute dilution factors were determined using the facility flow data between 2001 and 2004, which the Department determined to be 0.61 mgd (0.94 cfs) for daily maximum flow and 0.47 mgd (0.73 cfs) for maximum monthly average flow. Should the facility's flow increase 10% or more during the course of this permit cycle, the Department may recalculate both chronic and acute dilution factors, as the dilution factors are expected to be decreased as flow increase.

F. Compliance Assessment for Metals

All metals are to be analyzed as total recoverable metals Section 4.1.4 (Methods for Chemical Analysis of Water and Wastes, 1979) using the methods, detection, and quantitation levels specified below:

1. Copper

   The method detection level (MDL) for copper is 1 µg/L using graphite furnace atomic absorption spectrometry. The analytical test method is GPA Method 220.2 from 40 CFR Part 136. The quantitation level (QL) for copper is 5 µg/L (5 x MDL).

2. Mercury

   The method detection level (MDL) for mercury is 0.0002 µg/L using Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Atomic Fluorescence Spectrometry. The analytical test method is Method 1631E from 40 CFR 136.

3. Silver

The method detection level (MDL) for silver is 0.2 µg/L using graphite furnace atomic absorption spectrometry. The analytical test method is GPA Method 272.2 from 40 CFR 136. The quantitation level (QL) for silver is 1 µg/L (5 x MDL).

4. Zinc

The method detection level (MDL) for zinc is 5 µg/L using flame atomic absorption spectrometry. The analytical test method is GPA Method 289.1 from 40 CFR 136. The quantitation level (QL) for zinc is 25 µg/L (5 x MDL).

S2. MONITORING REQUIREMENTS

A. Monitoring Schedule

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Wastewater Influent	$CBOD_5$	mg/l	Plant Influent	2/week	24-hr composite
"	BOD_5	mg/l	Plant Influent	1/week	24-hr composite
"	TSS	mg/l	Plant Influent	2/week	24-hr composite
Wastewater Effluent	Flow	MGD	Final Effluent	daily	Continuous
	$CBOD_5$	mg/l	Final Effluent	2/week	24-hr composite
"	TSS	mg/l	Final Effluent	2/week	24-hr composite
"	Fecal Coliform Bacteria	cfu/100 mL	Final Effluent	2/week	grab
"	Ammonia (as NH_3-N)	mg/L	Final Effluent	1/week	24-hr composite
"	Mercury (total recoverable)	µg/L	Final Effluent	1 per 2 weeks	24-hr composite
"	Copper, silver, zinc (total recoverable)	µg/L	Final Effluent	1/month	24-hr composite
"	pH	Standard Units	Final Effluent	daily	grab

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
"	Temperature[g]	° F	Final Effluent	daily	grab
Wastewater Effluent WET Testing (see Conditions S8 and S9)	Acute Toxicity[a] Chronic Toxicity[b]		Final Effluent Final Effluent	2/year in 2009 July 2009 October 2009 2/year in 2009 July 2009 October 2009	24-hr composite 24-hr composite
Receiving Water	Metals: (total recoverable) copper, mercury, silver, zinc	µg/L	Upstream	1 per 3 months	Grab
Pollutants Listed in Part D of the NPDES Permit Application – Form 3510-2A					
Wastewater Effluent	a) Metals (Total Recoverable)[d] b) Cyanide (weak acid dissociable)[e] c) Total Phenolic Compounds d) Hardness (as $CaCO_3$) e) Volatile Organic Compounds f) Acid-extractable Compounds g) Base-neutral Compounds		Final Effluent	3 during 2010 (see Condition S11)	Grab
Pollutants Listed in Part B6 of the NPDES Permit Application (Form 35102A)[f]					
Wastewater Effluent	a) Dissolved Oxygen b) Total Kjeldahl Nitrogen (TKN) c) NO_3-N + NO_2-N d) Oil and Grease e) Total Phosphorus f) Total Dissolved Solids (TDS)		Final Effluent	3 during 2010 (see Condition S11)	Grab

[a] Testing and reporting requirements for the acute WET tests are specified in Condition S8 (Acute Toxicity) of this permit. The analysis results shall be submitted no later than the dates specified in Condition S8.B of this permit.

[b] Testing and reporting requirements for the chronic WET tests are specified in Condition S9 (Chronic Toxicity) of this permit. The analysis results shall be submitted no later than the dates specified in Condition S9.B of this permit.

[c] Final effluent shall be tested for pollutants listed in Part D (Expanded Effluent Testing Data) of the EPA Form 3510-2A (NPDES application). These pollutants are also listed in Appendix D of the fact sheet for this permit. The analysis results shall be reported in Part D of the next NPDES permit application.

[d] The metals are to be analyzed as "total recoverable metals," Section 4.1.4, Publication EPA-600/4-79-020, *Methods for Chemical Analysis of Water and Wastes*, 1979.

[e] Cyanide testing shall be based on the "weak and dissociable method" in the 17th Edition, *Standard Methods for the Examination of Water and Wastewater, 4500-CN I,* and as revised.

[f] To provide required data for Part B.6 (Effluent Testing Data) of the EPA Form 3510-2A (NPDES application) for the next permit application, the final effluent shall be tested for these parameters. Samples shall be collected for analysis at least three (3) times during the term of this permit, and results shall be reported in Part B.6 of the next NPDES permit application.

[g] The Permittee shall monitor the effluent temperature daily for a period of one year. If data indicate non-compliance with the new temperature criteria, the Department may require monitoring to be continued and modify the permit to include additional requirements to ensure that future compliance with the new temperature criteria is achieved.

[h] Ammonia monitoring is required during low river flow period only (August, September, and October).

B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the water and wastewater monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology (Department).

C. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations and at a minimum frequency of at least one calibration per year. Calibration records shall be maintained for at least three (3) years.

D. Laboratory Accreditation

All monitoring data shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement. Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited. Crops, soils, and hazardous waste data are exempted from this requirement pending accreditation of laboratories for analysis of these media by the Department.

S3. REPORTING AND RECORD KEEPING

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to the Department shall constitute a violation of the terms and conditions of this permit.

A. Reporting

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring data obtained during the previous month shall be summarized and reported on a form provided, or otherwise approved, by the Department, and be received no later than the 15th day of the month following the completed reporting period, unless otherwise specified in this permit. Priority pollutant analysis data shall be submitted no later than 45 days following the reporting period. The reports shall be sent to the Department of Ecology, Northwest Regional Office, 3190 160th Avenue SE, Bellevue, Washington 98008-5452.

All laboratory records providing data for organic and metal parameters shall include the following information: sampling date, sample location, date of analysis, parameter name, CAS number, analytical method/number, method detection limit (MDL), lab practical quantitation limit (PQL), reporting units, and concentration detected.

B. Records Retention

The Permittee shall retain records of all monitoring information for a minimum of three (3) years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place, method, and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2 of this permit, then the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Permittee's self-monitoring reports.

E. Noncompliance Notification

In the event the Permittee is unable to comply with any of the terms and conditions of this permit due to any cause, the Permittee shall:

1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance, correct the problem and, if applicable, repeat sampling and analysis of any noncompliance immediately and submit the results to the Department within thirty (30) days after becoming aware of the violation.

2. Immediately notify the Department of the failure to comply at (425) 649-7000.

3. Submit a detailed, written report to the Department within thirty (30) days (five [5] days for upsets, collection system overflows, and bypasses), unless requested earlier by the Department. The report shall contain a description of the noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

F. Maintaining a Copy of This Permit

A copy of this permit must be kept at the treatment plant and be made available upon request to the public or Ecology inspectors.

S4. FACILITY LOADING

A. Design Criteria

Flows or waste loadings of the following design criteria for the permitted treatment facility shall not be exceeded:

Average flow for the maximum month:	2.4 MGD
BOD_5 loading for maximum month:	2805 lb/day
TSS loading for maximum month:	2304 lb/day

B. Plans for Maintaining Adequate Capacity

The Permittee shall submit to the Department a plan and a schedule for continuing to maintain capacity when:

1. The actual flow or waste load reaches 85% of any one of the design criteria in S4.A for three consecutive months; or

2. When the projected increase would reach design capacity within five (5) years,

Whichever occurs first. If such a plan is required, it shall contain a plan and schedule for continuing to maintain capacity. The capacity as outlined in this plan must be sufficient to achieve the effluent limitations and other conditions of this permit. This plan shall address any of the following actions or any others necessary to meet the objective of maintaining capacity.

1. Analysis of the present design, including the introduction of any process modifications that would establish the ability of the existing facility to achieve the effluent limits and other requirements of this permit at specific levels in excess of the existing design criteria specified in paragraph A above.

2. Reduction or elimination of excessive infiltration and inflow of uncontaminated ground and surface water into the sewer systems.

3. Limitation on future sewer extensions or connections or additional waste loads.

4. Modification or expansion of facilities necessary to accommodate increased flow or waste load.

5. Reduction of industrial or commercial flows or waste loads to allow for increasing sanitary flow or waste load.

Engineering documents associated with the plan must meet the requirements of WAC 173-240-060, "Engineering Report," and be approved by the Department prior to any construction. The plan shall specify any contracts, ordinances, methods for financing, or other arrangements necessary to achieve this objective.

C. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

D. Notification of New or Altered Sources

The Permittee shall submit written notice to the Department whenever any new discharge or a substantial change in volume or character of an existing discharge into the POTW is proposed which: (1) would interfere with the operation of, or exceed the design capacity of, any portion of the POTW; (2) is not part of an approved general sewer plan or approved plans and specifications; or (3) would be subject to pretreatment standards under 40 CFR Part 403 and Section 307(b) of the Clean Water Act. This notice shall include an evaluation of the POTW's ability to adequately transport and treat the added flow and/or wasteload, the quality and volume of effluent to be discharged to the POTW, and the anticipated impact on the Permittee's effluent [40 CFR 122.42(b)].

S5. OPERATION AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

A. Certified Operator

An operator certified for at least a Class II plant by the State of Washington shall be in responsible charge of the day-to-day operation of the wastewater treatment plant. An operator certified for at least a Class I plant shall be in charge during all regularly scheduled shifts.

B. O & M Program

The Permittee shall institute an adequate operation and maintenance program for their entire sewage system. Maintenance records shall be maintained on all major electrical and mechanical components of the treatment plant, as well as the sewage system and pumping stations. Such records shall clearly specify the frequency and type of maintenance recommended by the manufacturer and shall show the frequency and type of maintenance performed. These maintenance records shall be available for inspection at all times.

C. Short-term Reduction

If a Permittee contemplates a reduction in the level of treatment that would cause a violation of permit discharge limitations on a short-term basis for any reason, and such reduction cannot be avoided, the Permittee shall give written notification to the Department, if possible, thirty (30) days prior to such activities, detailing the reasons for, length of time of, and the potential effects of the reduced level of treatment. This notification does not relieve the Permittee of their obligations under this permit.

D. Electrical Power Failure

The Permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated wastes or wastes not treated in accordance with the requirements of this permit during electrical power failure at the treatment plant and/or sewage lift stations either by means of alternate power sources, standby generator, or retention of inadequately treated wastes. The Permittee shall maintain Reliability Class II (EPA 430-99-74-001) at the wastewater treatment plant, which requires primary sedimentation and disinfection.

E. Prevent Connection of Inflow

The Permittee shall strictly enforce their sewer ordinances and not allow the connection of inflow (roof drains, foundation drains, etc.) to the sanitary sewer system.

F. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited, and the Department may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, or 3) is applicable).

1. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.

   Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by the Department prior to the bypass. The Permittee shall submit prior notice, if possible, at least ten (10) days before the date of the bypass.

2. Bypass which is unavoidable, unanticipated, and results in noncompliance of this permit.

   This bypass is permitted only if:

   a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. “Severe property damage” means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

   b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been

installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.

c. The Department is properly notified of the bypass as required in Condition S3.E of this permit.

3. Bypass which is anticipated and has the potential to result in noncompliance of this permit.

The Permittee shall notify the Department at least thirty (30) days before the planned date of bypass. The notice shall contain: (1) a description of the bypass and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration of bypass under each alternative; (5) a recommendation as to the preferred alternative for conducting the bypass; (6) the projected date of bypass initiation; (7) a statement of compliance with SEPA; (8) a request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated; and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above shall be considered during preparation of the engineering report or facilities plan and plans and specifications and shall be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

The Department will consider the following prior to issuing an administrative order for this type of bypass:

a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.

b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.

c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, the Department will approve or deny the request. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by the Department under RCW 90.48.120.

G. Operations and Maintenance Manual

The approved Operations and Maintenance (O&M) Manual shall be kept available at the treatment plan and all operators shall follow the instructions and procedures of this manual.

1. Emergency procedures for plant shutdown and cleanup in event of wastewater system upset or failure.

2. Wastewater system maintenance procedures that contribute to the generation of process wastewater.

3. Any directions to maintenance staff when cleaning, or maintaining other equipment or performing other tasks which are necessary to protect the operation of the wastewater system (e.g. defining maximum allowable discharge rate for draining a tank, blocking all floor drains before beginning the overhaul of a stationary engine.)

4. The treatment plant process control monitoring schedule.

The O&M Manual shall be reviewed by the Permittee at least annually and the Permittee shall confirm this review by letter to the Department. Substantial changes or updates to the O&M Manual shall be submitted to the Department whenever they are incorporated into the manual.

S6. PRETREATMENT

A. General Requirements

The Permittee shall work with the Department to ensure that all commercial and industrial users of the publicly owned treatment works (POTW) are in compliance with the pretreatment regulations promulgated in 40 CFR Part 403 and any additional regulations that may be promulgated under Section 307(b) (pretreatment) and 308 (reporting) of the Federal Clean Water Act.

B. Wastewater Discharge Permit Required

The Permittee shall not allow significant industrial users (SIUs) to discharge waste water to the Permittee's sewerage system until such user has received a wastewater discharge permit from the Department in accordance with Chapter 90.48 RCW and Chapter 173-216 WAC, as amended.

C. Identification and Reporting of Existing, New, and Proposed Industrial Users

1. The Permittee shall take continuous, routine measures to identify all existing, new, and proposed SIUs discharging or proposing to discharge to the Permittee's sewerage system (see Appendix B of fact sheet for definitions).

2. Within thirty (30) days of becoming aware of an unpermitted existing, new, or proposed industrial user who may be an SIU, the Permittee shall notify such user by registered mail that, if classified as an SIU, they shall be required to apply to the Department and obtain a State Waste Discharge Permit. A copy of this notification letter shall also be sent to the Department within this same thirty (30)-day period.

D. Annual Submittal of List of Industrial Users

The Permittee shall submit annually to the Department a list summarizing all existing and proposed SIUs. This list must be received by the Department by July 1 of each year of the permit.

E. Duty to Enforce Discharge Prohibitions

1. In accordance with 40 CFR 403.5(a), the Permittee shall not authorize or knowingly allow the discharge of any pollutants into its POTW which cause pass through or interference, or which otherwise violates general or specific discharge prohibitions contained in 40 CFR Part 403.5 or WAC-173-216-060.

2. The Permittee shall not authorize or knowingly allow the introduction of any of the following into the POTW:

a. Pollutants which create a fire or explosion hazard in the POTW (including, but not limited to waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21).

b. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, or greater than 11.0 standard units, unless the works are specifically designed to accommodate such discharges.

c. Solid or viscous pollutants in amounts that could cause obstruction to the flow in sewers or otherwise interfere with the operation of the POTW.

d. Any pollutant, including oxygen-demanding pollutants, (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW.

e. Petroleum oil, nonbiodegradable cutting oil, or products of mineral origin in amounts that will cause interference or pass through.

f. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity which may cause acute worker health and safety problems.

g. Heat in amounts that will inhibit biological activity in the POTW resulting in interference but in no case heat in such quantities such that the temperature at the POTW headworks exceeds 40º C (104º F) unless the Department, upon request of the Permittee, approves, in writing, alternate temperature limits.

h. Any trucked or hauled pollutants, except at discharge points designated by the Permittee.

i. Wastewaters prohibited to be discharged to the POTW by the Dangerous Waste Regulations (Chapter 173-303 WAC), unless authorized under the Domestic Sewage Exclusion (WAC 173-303-071).

3. All of the following are prohibited from discharge to the POTW unless approved in writing by the Department under extraordinary circumstances (such as a lack of direct discharge alternatives due to combined sewer service or the need to augment sewage flows due to septic conditions):

a. Noncontact cooling water in significant volumes.

b. Storm water, and other direct inflow sources.

c. Waste waters significantly affecting system hydraulic loading, which do not require treatment, or would not be afforded a significant degree of treatment by the system.

4. The Permittee shall notify the Department if any industrial user violates the prohibitions listed in this section.

S7. RESIDUAL SOLIDS

Residual solids include screenings, grit, scum, primary sludge, waste activated sludge, and other solid waste. The Permittee shall store and handle all residual solids in such a manner so as to prevent their entry into state ground or surface waters. The Permittee shall not discharge leachate from residual solids to state surface or ground waters.

S8. ACUTE TOXICITY

A. Testing Requirements

The Permittee shall perform acute toxicity testing of final effluent once in the summer of 2009 and once in the winter of 2009, prior to submission of the application for permit renewal. The two species listed below shall be used on each sample and the results submitted to the Department as a part of the permit

renewal application process. The Permittee shall conduct acute toxicity testing on a series of five concentrations of effluent and a control in order to be able to determine appropriate point estimates and an NOEC. The percent survival in 100% effluent shall also be reported.

Acute toxicity tests shall be conducted with the following species and protocols:

Freshwater Acute Toxicity Test Species		Method
Fathead minnow	*Pimephales promelas* (96-hour static-renewal test)	EPA/600/4-90/027F
Water flea	*Ceriodaphnia dubia, Daphnia pulex,* or *Daphnia magna* (48-hour static test, method)	EPA/600/4-90/027F

B. Sampling and Reporting Requirements

1. All reports for whole effluent toxicity tests shall be submitted in accordance with the most recent Department of Ecology specifications regarding format and content. Reports shall contain bench sheets and reference toxicant results for test methods. The effluent and reference toxicant test results shall also be submitted as electronic files on floppy disks in the Toxicity Standardized Electronic Reporting Format (TSERF) or other compatible format.

2. Testing shall be conducted on 24-hour composite effluent samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.

3. Permittees that potentially have ammonia and/or chlorine in the effluent shall measure total ammonia and/or chlorine from a sample collected for toxicity testing. All samples taken for toxicity testing shall have pH, total alkalinity, total hardness, dissolved oxygen, and conductivity or salinity measured prior to test initiation.

4. All toxicity tests shall meet quality assurance criteria in the most recent versions of the EPA manual listed in Subsection A and the Department of Ecology Publication # WQ-R-95-80, *Whole Effluent Toxicity Testing Regulatory Guidance and Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent. If control performance does not meet protocol standards for acceptability, the test shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water or pristine natural water meeting the requirements of the EPA manual listed in Subsection A. Dilution water for toxicity testing shall be of sufficient quality for good control performance.

6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.

7. The Permittee may choose to conduct a full dilution series test in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The dilution series must include the ACEC of 67% effluent.

8. All whole effluent toxicity tests that involve hypothesis testing and do not comply with the acute statistical power standard of 29% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.

S9. CHRONIC TOXICITY

A. Testing Requirements

The Permittee shall perform chronic toxicity testing of final effluent once in the summer of 2009 and once in the winter of 2009, prior to submission of the application for permit renewal. All of the chronic toxicity tests listed below shall be conducted on each sample. The results of this chronic toxicity testing shall be submitted to the Department as a part of the permit renewal application process.

The Permittee shall conduct chronic toxicity testing on a series of at least five concentrations of effluent and a control in order to be able to determine appropriate point estimates and an NOEC. This series of dilutions shall include the acute critical effluent concentration (ACEC). The ACEC equals 67% effluent. The Permittee shall compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.

Chronic toxicity tests shall be conducted with the following species and the most recent version of the following protocols:

Freshwater Chronic Toxicity Test Species		Method
Fathead minnow	*Pimephales promelas*	EPA/600/4-91/002
Water flea	*Ceriodaphnia dubia*	EPA/600/4-91/002

B. Sampling and Reporting Requirements

1. All reports for whole effluent toxicity testing shall be submitted in accordance with the most recent Department of Ecology specifications regarding format and content. Reports shall contain bench sheets and reference toxicant results for test methods. The effluent and reference toxicant test results shall also be submitted as electronic files on floppy disks in the Toxicity Standardized Electronic Reporting Format (TSERF) or other compatible format.

2. Testing shall be conducted on 24-hour composite effluent samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.

3. Permittees that potentially have ammonia and/or chlorine in the effluent shall measure total ammonia and/or chlorine from a sample collected for toxicity testing. All samples taken for toxicity testing shall have pH, total alkalinity, total hardness, dissolved oxygen, and conductivity or salinity measured prior to test initiation.

4. All toxicity tests shall meet quality assurance criteria in the most recent versions of the EPA manual or other test method listed in Subsection A and the Department of Ecology Publication # WQ-R-95-80, *Whole Effluent Toxicity Testing Regulatory Guidance and Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent. If control performance does not meet protocol standards for acceptability, the test shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water or pristine natural water meeting the requirements of the EPA manual listed in Subsection A. Dilution water for toxicity testing shall be of sufficient quality for good control performance.

6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.

7. The Permittee may choose to conduct a full dilution series test in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The dilution series of concentrations must include the ACEC (67% effluent) and the CCEC (10% effluent). The ACEC and CCEC may either substitute for the effluent concentration that is closest to it in the dilution series or be an extra effluent concentration.

8. All whole effluent toxicity tests that involve hypothesis testing and do not comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.

S10. OUTFALL EVALUATION

The Permittee shall inspect once during the life of this permit, the submerged portion of the outfall line and diffuser to document its integrity and continued function. The inspection report shall be submitted to the Department in conjunction with the permit application. If conditions allow for a photographic verification, it shall be included in the report.

S11. ADDITIONAL TESTING OF EFFLUENT

To provide required data for EPA Form 3510-2A, Part B.6 and D (NPDES application) for the next permit cycle, the following additional tests shall be conducted on the final effluent. Samples shall be collected for analysis at least three times during the year of 2010, and samples shall be taken at least four months apart. The results shall be submitted with EPA Form 3510-2A (NDPES application form) at the time of reapplication for renewal of this permit.

Part B6 of the Application

Dissolved Oxygen
Total Kjeldahl Nitrogen (TKN)
NO3 – N + NO2 – N
Oil and Grease
Total Phosphorus
Total Dissolved Solids (TDS)

Part D of the Application

Metals (Total Recoverable)[b]
Cyanide (weak acid dissociable)
Total Phenolic Compounds
Hardness (as $CaCO_3$)
Volatile Organic Compounds
Acid-extractable Compounds
Base-neutral Compounds

A listing of the parameters required in these analyses is found in Appendix F of the fact sheet accompanying this permit, and can also be found in EPA Form 3510-2A, Part D, "Expanded Effluent Testing Data."

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Department shall be signed and certified.

A. All permit applications shall be signed by either a principal executive officer or a ranking elected official.

B. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the Department, and

2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

C. Changes to authorization. If an authorization under paragraph B.2, above, is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of B.2 must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

G2. RIGHT OF ENTRY

The Permittee shall allow an authorized representative of the Department, upon the presentation of credentials and such other documents as may be required by law:

A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit;

B. To have access to and copy at reasonable times any records that must be kept under the terms of the permit;

C. To inspect at reasonable times any monitoring equipment or method of monitoring required in the permit;

D. To inspect at reasonable times any collection, treatment, pollution management, or discharge facilities; and

E. To sample at reasonable times any discharge of pollutants.

G3. PERMIT ACTIONS

This permit shall be subject to modification, suspension, or termination, in whole or in part by the Department for any of the following causes:

A. Violation of any permit term or condition;

B. Obtaining a permit by misrepresentation or failure to disclose all relevant facts;

C. A material change in quantity or type of waste disposal;

D. A material change in the condition of the waters of the state; or

E. Nonpayment of fees assessed pursuant to RCW 90.48.465.

The Department may also modify this permit, including the schedule of compliance or other conditions, if it determines good and valid cause exists, including promulgation or revisions of regulations or new information.

G4. REPORTING A CAUSE FOR MODIFICATION

The Permittee shall submit a new application, or a supplement to the previous application, along with required engineering plans and reports, whenever a material change in the quantity or type of discharge is anticipated which is not specifically authorized by this permit. This application shall be submitted at least sixty (60) days prior to any proposed changes. Submission of this application does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

G5. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications should be submitted at least one hundred eighty (180) days prior to the planned start of construction. Facilities shall be constructed and operated in accordance with the approved plans.

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in the permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G7. DUTY TO REAPPLY

The Permittee must apply for permit renewal at least one hundred eighty (180) days prior to the specified expiration date of this permit.

G8. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

G9. TOXIC POLLUTANTS

If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Clean Water Act for a toxic pollutant and that standard or prohibition is more stringent than any limitation upon such pollutant in the permit, the Department shall institute proceedings to modify or revoke and reissue the permit to conform to the new toxic effluent standard or prohibition.

G10. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G11. ADDITIONAL MONITORING

The Department may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G12. PAYMENT OF FEES

The Permittee shall submit payment of fees associated with this permit as assessed by the Department. The Department may revoke this permit if the permit fees established under Chapter 173-224 WAC are not paid.

G13. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be and be deemed to be a separate and distinct violation.